

Remarks

I. Status of claims

Claims 1-10, 12, 13, and 15-25 were pending.

Claim 10 has been canceled.

Claims 1, 8, 12, 13, 15, and 22 have been amended.

II. Claim rejections under 35 U.S.C. § 101

The Examiner has rejected claims 1-10, 12, 13, and 15-25 under 35 U.S.C. § 101.

The preambles of independent method claims 1, 9, 12, 13, 15, and 22 have been amended so that the subject matter of these claims is directed to a machine-implemented method of generating a payment indicium. These independent claims therefore are limited to a practical application within the technological arts because the claimed invention as a whole produces a practical application by producing a concrete, tangible, and useful result (see, e.g., MPEP § 2106 IV.B.1(b)). For this reason, independent claims 1, 9, 12, 13, 15, and 22 are directed to statutory subject matter under 35 U.S.C. § 101.

Claims 2-7 depend from independent claim 1, claims 16-20, 24 and 25 depend from independent claim 15, and claim 23 depends from independent claim 22. Therefore, claims 16-20, and 23-25 are drawn to statutory subject matter for the same reasons as independent claims 1, 15, and 22.

The preamble of independent claim 8 has been amended so that the subject matter of the claim is directed to a data processing system for generating a payment indicium. Independent claim 8 therefore is limited to a practical application within the technological arts because the claimed invention as a whole produces a practical application by producing a concrete, tangible, and useful result (see, e.g., MPEP § 2106 IV.B.1(b)). For this reason, independent claim 8 is directed to statutory subject matter under 35 U.S.C. § 101.

Claim 21 depends from independent claim 8 and therefore is drawn to statutory subject matter for the same reasons explained above.

For the reasons explained above, the Examiner's rejection of claims 1-10, 12, 13, and 15-25 under 35 U.S.C. § 101 now should be withdrawn.

Claims 1-8 and 21 have not been rejected for any reason other than the above-described rejection under 35 U.S.C. § 101. Accordingly, claims 1-8 and 21 now should be allowed.

Similarly, claims 12, 13, and 22, which have been rewritten in independent form, have not been rejected for any reason other than the above-described rejection under 35 U.S.C. § 101. Accordingly, these claims along with claim 23, which depends from claim 22, now should be allowed.

III. Claim rejections under 35 U.S.C. § 112

The Examiner has rejected claims 15-20, 24, and 25 under 35 U.S.C. § 112, second paragraph, as being indefinite.

In particular, the Examiner has indicated that:

In independent claim 15, the "encoding level varies ..." phrase makes the claim indefinite and unclear in that neither means nor interrelationship of means nor method steps are set forth in the claim in order to achieve the desired results in the "encoding level that varies ..." phrase.

Dependent claims 16-20 and 24-25 are unclear in that they depend from an unclear independent claim. Clarification is requested.

Claim 15 has been amended to address the Examiner's concerns and, therefore, the rejection of claims 15-20, 24, and 25 now should be withdrawn.

Since claims 15-20, 24, and 25 have not been rejected on the basis of any prior art, these claims are in condition for allowance and now should be allowed.

IV. Claim rejection under 35 U.S.C. § 102

The Examiner has rejected claim 10 under 35 U.S.C. § 102(e) over Ryan (U.S. 5,871,288). Claim 10, however, has been canceled rendering the rejection moot.

V. Claim rejection under 35 U.S.C. § 103

The Examiner has rejected independent claim 9 under 35 U.S.C. § 103(a) over Doeberl (U.S. 5,075,862). In particular, the Examiner has indicated that (emphasis added):

As per claim 9, Doeberl clearly discloses a method of extracting payment information from a payment indicium, comprising:

- decoding the extracted digital token to produce a decoded message (see Doeberl abstract, figures 2-9 and associated text, column 1, lines 65-68, column 2, lines 1-16, column 3, lines 11-45, column 4, lines 47-55, and column 5, lines 7-65); and
- extracting from the decoded message payment information encoded in the payment indicium (see Doeberl abstract, figures 2-9 and associated text, column 1, lines 65-68, column 2, lines 1-16, column 3, lines 11-45, column 4, lines 47-55, and column 5, lines 7-65);

What is not explicit in Doeberl is the method of extraction of indicium from a graphical representation.

- extracting a digital token from a payment indicium based upon a comparison of the payment indicium and a base image.

However, Doeberl clearly teaches the encoding and extraction of data within a graphical representation. It is clearly thought that one can use an overlay to detect the differences between the original graphics and the manipulated graphics and to extract the differences as to detect the information hidden in the graphical representation. Therefore, it would have been obvious to one having ordinary skill in the art at the time the current invention was made to combine the teaches of Doeberl and extend it to the other methods of graphical manipulation such as halftone image processing to achieve a superior method of obfuscating certain data within a graphical representation of a secure indicium. In addition, it is well known within the art to use a comparison of different states of an image to extract hidden information from within the manipulated image such as an image embedded with a digital token by way of halftone watermarking.

The Examiner's understanding of Doeberl's teachings is patently incorrect. In particular, there is no teaching or suggestion in Doeberl that would have led one of ordinary

skill in the art at the time of the invention to believe that there was an encoded digital token containing payment information in any of the indicia described in Doeberl. Indeed, except for the overlay patterns, each of the elements of the various indicia described in Doeberl corresponds to the prior art indicium 20 (FIG. 1), which does not include any digital token whatsoever. The overlay pattern merely "includes numerical information represented in diagrammatic form" (col. 3, lines 19-20). Doeberl expressly teaches that (col. 3, lines 20-30; emphasis added):

"Representation in diagrammatic form" means representation of numerical information by selected characteristics and/or spatial relationships of graphical elements of an indicia. Such characteristics and relationships include size, shape, length, orientation and/or position relative to fixed elements of the indicia of markers such as dots, bars, lines and the like, each marker representing a numeric value. "Representation in diagrammatic form" does not include printing of alphanumeric characters, bar codes or binary coded bit maps.

Therefore, the Examiner's assertions regarding the use of the overlay pattern to "detect the differences between the original graphics and the manipulated graphics and to extract the differences as to detect the information hidden in the graphical representation" are incorrect, as there is no information hidden in Doeberl's payment indicia. Indeed, the entire purpose of Doeberl's overlay pattern is to readily convey numerical information (e.g., time of printing and month of latest inspection of the value printing system) based on visual inspection of the overlay pattern by postal employees (see, e.g., col. 5, line 66, through col. 6, line 34). For this reason, Doeberl does not even contemplate a payment indicium having an digital token that is extractable based on a comparison of the payment indicium and a base image, as recited in claim 9.

Since there are no digital tokens in the indicia described in Doeberl, Doeberl clearly does not teach or suggest anything about extracting a digital token from a payment indicium, much less anything about extracting a digital token from a payment indicium based upon a comparison of the payment indicium and a base image. Accordingly, Doeberl also fails to teach or suggest anything about decoding an extracted digital token to produce a decoded message, and extracting payment information from the decoded message, as recited in claim 9.

Regarding the Examiner's assertions relating to halftone image processing and halftone watermarking, the Examiner has failed to provide the requisite factual basis and

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failed to establish the requisite motivation to support his deemed conclusion that the features recited in claim 9 would have been obvious to one of ordinary skill in the art at the time of the invention. The Examiner is requested to cite other art in support of his vague and unsubstantiated assertions. Alternatively, if the Examiner is aware of facts within his personal knowledge that provide the requisite factual basis and establishes the requisite motivation to support his deemed conclusion that the features recited in claim 9 would have been obvious, the Examiner is requested to provide an affidavit in accordance with 37 CFR § 1.104(d)(2). Otherwise, the Examiner should withdraw any rejection of claim 9 that relies on the assertions relating to halftone image processing and halftone watermarking reproduced above.

For at least these reasons, the Examiner's rejection of claim 9 under 35 U.S.C. § 103(a) over Doeberl should be withdrawn.

VI. Conclusion

For the reasons explained above, all of the pending claims are now in condition for allowance and should be allowed.

Charge any excess fees or apply any credits to Deposit Account No. 08-2025.

Respectfully submitted,

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Edouard Garcia
Reg. No. 38,461
Telephone No.: (650) 631-6591

Please direct all correspondence to:

Hewlett-Packard Company
Intellectual Property Administration
Legal Department, M/S 35
P.O. Box 272400
Fort Collins, CO 80528-9599